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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,690

06/21/2006

Yehuda Yuri Simon

7640-X06-060

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27317 7590 01/12/2009
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EXAMINER

LAUX, DAVID J

ART UNIT

PAPER NUMBER

4193

MAIL DATE

DELIVERY MODE

01/12/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,690	Applicant(s) SIMON, YEHUDA YURI	
	Examiner David Laux	Art Unit 4193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 27-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/10/06 & 06/23/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because Figs. 1-3 do not provide enough detail to cover the scope of the claimed invention and Figs. 4-6 are photographs, which are not excepted by the USPTO without a petition. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 27-28, 30-33, 35-38, 40-50 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US 4,644,877 to Barton et al.

4. '877 discloses a system for neutralizing fluid chemical waste products, said system comprising: a pyrolysis/reaction chamber (See Fig. 1 reproduced in part below) having three or more openings (62, 40, 90) through which one or more plasma torches (26, 28) are inserted (40), through which one or more inlet conduits pass (62), and to which an exit conduit is connected (90); a pre-

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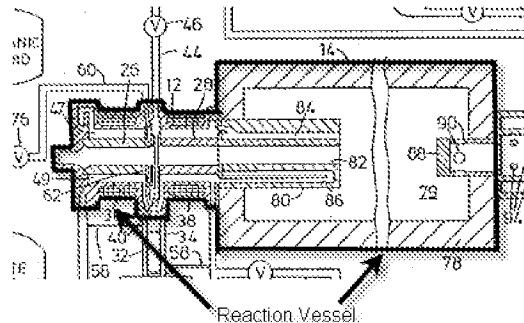
pyrolysis subsystem comprising a container (64, 66) to collect said waste, a valve (68) to regulate the flow rate, and a pump (74), which pumps said waste from said container through said inlet conduits (60, 62); a post-pyrolysis subsystem (18); sensors that provide information concerning various operating parameters at different locations in said system (Col.5, line 58; Col. 11, lines 45-48); a control unit (Col. 8, lines 46-48; Col. 11, lines 45-48) ("Fully instrumented and monitoring equipped control room[s].." inherently are capable of acting as an input unit, storing information and performing computations.) that utilizes information provided by said sensors as well as other information provided to it from other sources in order to optimize and automate the operation of said system; and a display system (Col. 8, lines 46-48) ("Fully instrumented and monitoring equipped control room[s].." inherently are capable of having a display monitor) to provide the operator of said system with information concerning the operation and operating parameters of said system; an atomizer attached at the end pointing into said chamber of each of said inlet conduits through which said pump pumps said waste, thereby atomizing said liquid waste and creating a jet of small droplets (Col. 4, lines 18-20; '877 contemplates the use of an atomizer but does not require the use because the waste material is atomized as a result of being exposed to a plasma stream; atomizers are well known in the art and are one of a number of alternative spray methods that could be utilized in such a device); and each of said atomizers is located opposite the at least one plasma stream/s created by said plasma torch/es, wherein said location of said atomizers provides the conditions for effective contact of said droplets with said plasma stream/s

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(Col. 11, lines 24-31; contemplating the use of separate entrances for the plasma stream and waste material, wherein the apparatus is capable of being located in the vicinity of the end of a production line, wherein the pyrolysis/reaction chamber (See Fig. 1 reproduced in part below) is a double-walled chamber, comprising a space between said walls through which water is caused to circulate (84 is conduit created by the chambers two walls the quenching neutralizing water flows to cool the pyrolysis chamber), thereby cooling said pyrolysis/reaction chamber, wherein the walls of the chamber are made of stainless steel lined with a refractory material (Col. 4, lines 46-48), wherein the apparatus includes a means for adjusting the current and voltage to the electrodes of the plasma torch (Col. 9, lines 25-28), wherein the post-pyrolysis subsystem comprises a particle trap (18), wherein the post-pyrolysis subsystem comprises a radiation cooler (94, 96, & 118), wherein the post-pyrolysis subsystem comprises at least one spray tower (16) comprising an entrance (92) in its lower end and means for creating a downward spray of water droplets (94), whereby when the mixture of product gases is introduced into said spray tower (16) through said entrance (92), said product gases will rise in said tower through said spray of water droplets, thereby dissolving at least one of the components of the mixture of product gases in water, wherein the post-pyrolysis subsystem comprises monitoring equipment (154) to measure the composition of the mixture of product gases at selected locations, wherein said system has a size and weight that allow said system to be transported from location to location and

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placed in position at an appropriate place in an existing production line (Col. 8, lines 44-57).



Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 29 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over '877 in view of US 6,971,323 to Capote et al.

7. '877 fails to disclose facilities for neutralizing the chemical waste products after they exit the production line or a means for adjusting the current while the plasma torch is operating. '323 teaches facilities for neutralizing the chemical waste products after they exit the production line (Col. 4, lines 1-5) and a means for adjusting the current while the plasma torch is operating (Col. 7, lines 51-61). It would have been obvious to one skilled in the art at the time of invention to combine the waste material treatment apparatus of '877 with the temporary neutralization means and variable current means of '323 because such a

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combination would have produced the added benefit of a less reactive or corrosive or malodorous waste material and an ability to process different types of waste material.

8. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over '877 in view of 4,223,614 to Barkhuus et al.

9. '877 fails to disclose a post-pyrolysis subsystem comprising a storage vessel for collecting the solution comprising at least one of the components of the mixture of product gases dissolved in water, and a pump for recycling said solution through the means for creating the downward spray of water droplets in the spray tower. '614 teaches a post-pyrolysis subsystem comprising a storage vessel (34) for collecting the solution comprising at least one of the components of the mixture of product gases dissolved in water, and a pump (190) for recycling said solution. It would have been obvious to one skilled in the art at the time of invention to combine the waste treatment apparatus of '877 with the solution recycling subsystem of '614 because such a combination would have produced the added benefit of a more cost effective apparatus by reusing the cleaning solution.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Laux whose telephone number is (571) 270-7619. The examiner can normally be reached on M-R 7:30-5, F 7:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272-4419. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. L./
Examiner, Art Unit 4193

/Derris H Banks/
Supervisory Patent Examiner, Art
Unit 3725
